Commonwealth of Kentucky Division for Air Quality

PERMIT STATEMENT OF BASIS

Title V Final Permit No. V-98-019
TRANSMONTAIGNE TERMINALING, INC., GREATER CINCINNATI TERMINAL
COVINGTON, KENTUCKY 41017
June 6, 2000
JAMES A. NEAL, REVIEWER
Plant I.D. # 079-2020-0004
Application Log # F502

PUBLIC AND U.S. EPA REVIEW:

On September 30, 1998, the public notice on availability of the draft permit and supporting material for comments by persons affected by the terminal was published in The Kentucky Post. The public comment period expired 30 days from the date of publication. During this time, the only comments received were from TransMontaigne Terminaling, Inc.- Covington (Greater Cincinnati Terminal) in a letter dated October 9, 1998. The division's response to these comments is included in Attachment A to this document.

Concurrently, the draft permit and all supporting materials were also made available to U.S. EPA, Region IV for review. The 45-day EPA review period also began on September 30, 1998. No response from U.S.EPA was received.

There are several changes in the proposed permit from the draft permit. All of these changes have been specifically identified in Attachment A.

ATTACHMENT A

Comment on Draft Title V Permit from

TransMontaigne Terminaling Inc. – Covington (Greater Cincinnati) Terminal

1. Draft Permit Page Number : Cover Page

Mailing Address: TransMontaigne Terminaling, Incorporated

530 Wells Fargo, Suite 118 280 N. College, Suite 500

Houston, Texas 77090 Fayetteville, AR 72701

Explanation: The mailing address for TransMontaigne Terminaling, Incorporated has changed.

Response: The mailing address has been corrected on the Title V permit.

2. Draft Permit Page Number: Page 2 of 25

1. **Operating Limitations**:

a. The permittee shall notify the Division in writing and receive written approval prior to loading liquids other than those listed below:

Diesel Fuel

Conventional Gasoline

Reformulated Gasoline

Asphalt Cement

Mineral Spirits

Petroleum Products with a Vapor Pressure Less Than or Equal to Gasoline

Explanation: Additional flexibility for the materials stored at the terminal is required. Petroleum products with a vapor pressure less than or equal to gasoline can be stored in the gasoline tanks and loaded through the gasoline loading racks without triggering any additional regulatory requirements or increasing total emissions at the terminal.

Response: The permit has been changed to allow Petroleum products with a vapor pressure less than or equal to gasoline to be stored in the gasoline tanks and loaded through the gasoline loading racks. Please refer to respective sections of the permit for these changes.

3. Draft Permit Page Number: Page 2 of 25

1. **Operating Limitations**:

b. (1) The owner or operator shall obtain the vapor tightness documentation described in \(\frac{\$60.505(b)}{60.505(b)} \) 40 CFR \(60.505(b) \) for each gasoline tank truck which is to be loaded at the affected facility.

Explanation: Clarification that the requirement is in 40 CFR not 401 KAR.

Response: The 40 CFR portion was added to the permit condition.

4. Draft Permit Page Number: Page 2 of 25

1. **Operating Limitations**:

b. (3) The owner or operator shall cross-check each tank identification number obtained in paragraph $\frac{(e)(2)}{b}(2)$ of this section with the file of tank vapor tightness documentation within 2 weeks after the corresponding tank is loaded.

Explanation: Correction of reference number.

Response: The reference was corrected on the permit condition.

- 5. Draft Permit Page Number: Page 4 of 25
 - 3. **Testing Requirements**:
 - c. (6) Method 25A or 25B shall be used for determining the total organic compounds concentration at each interval. The calibration gas shall be either propane or butane. The owner or operator may exclude the methane or ethane content in the exhaust vent by any method (e.g., Method 18) approved by the administrator.

Explanation: The exclusion of methane and ethane from total organic compounds for VOC determinations is in accordance with 40 CFR 60.503(c)(6).

Response-The permit condition has been rewritten to include all of the regulation name.

6. Draft Permit Page Number: Page 7 of 25

SECTION B – EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

08 (T-7) External Floating Roof Gasoline Storage Tank

420,000 gallon capacity

 $1,589 \text{ m}^3$

21 (T-15) Fixed Roof Mineral Spirits Storage Tank

21,000 gallon capacity 79.0 m³

Explanation: Mineral Spirits is not a petroleum liquid as defined in 401 KAR 61:050 Section 1(1). Therefore, this tank should not be listed with the gasoline storage tanks and should be moved to insignificant activities section of the permit (**SECTION C - INSIGNIFICANT ACTIVITIES**).

Response-Based on information submitted by the applicant, this facility was moved to the insignificant activity list.

- 7. Draft Permit Page Number: Page 7 of 25
 - 1. **Operating Limitations**:
 - c. (2) The gap area of gaps exceeding 0.32 cm (one-eight (1/8) in) in width between the secondary seal installed pursuant to Section 3(4) 401 KAR 61:050, Section 3(4)(a) and the tank wall shall not exceed 6.5 sq. cm./0.3 m of tank diameter (1.0 sq. in/ft).

Explanation: Clarification that the requirement is in 401 KAR.

Response-The reference regulation has been added to the permit.

- 8. Draft Permit Page Number: Page 8 of 25
 - 4. **Specific Monitoring Requirements**:

Storage tanks T-1, T-2, T-3, T-4, T-5, T-6, T-7, and T-15 shall comply with the requirements of 401 KAR 61:050, Section 5.

Explanation: Mineral Spirits is not a petroleum liquid as defined in 401 KAR 61:050 Section 1(1). Therefore, this tank should not be listed with the gasoline storage tanks and should be moved to insignificant activities section of the permit (**SECTION C - INSIGNIFICANT ACTIVITIES**).

Response-Based on information submitted by the applicant, this facility was moved to the insignificant activity list.

- 9. Draft Permit Page Number: Page 11 of 25
 - 4. Specific Reporting Requirements:
 - a. Please refer to 6. <u>Specific Reporting Requirements</u> for the Loading Rack, EIS 01(LR-1).

Report the volume of liquid loaded out by barge on a tanker-by-tanker basis. Calculate emissions from the loading operation using the most current guidance provided AP-42. Records required under this section shall be maintained on site for a period of five (5) years after each record is recorded, and the permittee shall provide these records to Division or Regional office personnel upon request.

Explanation: The reporting requirements for the Loading Rack are not applicable to the Barge Loading operation. The proposed verbiage above will clarify the specific reporting requirements for the Barge Loading and demonstrate compliance with the conditions of the permit.

Response-The permit condition has been revised. Please refer to the proposed permit.

10. Draft Permit Page Number: Page 12 of 25

Compliance Demonstration Method

Opacity limit – No compliance demonstration is necessary while the asphalt heater(s) consume the primary fuel, natural gas. The terminal is assured to be in compliance with the particulate and sulfur dioxide standards. When HDS is being combusted, the permittee shall demonstrate compliance through maintenance of the records required by Item 4. Specific Monitoring Requirements, below.

When High Sulfur Diesel (HSD) fired: Particulate, PM, (lb/mm/BTU) = [HDS consumption rate (1000 gals/hr) X 2 lbs/1000 gals (refer to AP-42, 1/95, Tbl. 1.3-2, Criteria Pollutant EF for uncontrolled fuel oil combustion / (Asphalt Heater Rated Capacity (mmBTU)/hour)] Sulfur Dioxide, (lb/mm/BTU) = [HDS consumption rate (1000 gals/hr) X 142 X % sulfur X lbs/1000 gals (refer to AP-42, 1/95, Tbl. 1.3-2, Criteria Pollutant EF for uncontrolled fuel oil combustion / (Asphalt Heater Rated Capacity (mmBTU)/hour)]

- a. Natural Gas Combustion -
 - No compliance demonstration is necessary while the asphalt heater(s) consume the primary fuel, natural gas. Due to the nature of natural gas combustion, no opacity will result from the use of natural gas in the asphalt heaters. In addition, due to the low content of particulate matter and sulfur in the natural gas, the asphalt heaters are assured to be in compliance with the particulate matter, and sulfur dioxide standards.
- b. High Sulfur Diesel Combustion -

When HDS is being combusted, the permittee shall demonstrate compliance with the applicable opacity standard and sulfur standard by complying with the conditions in <u>4.</u> Specific Monitoring Requirements. Due to the low content of particulate matter in diesel fuel, the asphalt heaters are assured to be in compliance with the particulate matter standard.

Explanation: The proposed verbiage above will help clarify the differences in requirements for demonstrating compliance during each operating scenario. The requirements are addressed separately for natural gas and HSD.

Compliance with the opacity, sulfur dioxide, and particulate standards are assured by combusting natural gas. There is no likelihood that standards will be violated, therefore, no additional periodic monitoring is required when combusting natural gas in the asphalt heaters.

For HSD combustion, compliance with the particulate matter standard is assured by the low particulate content in HSD. Additional periodic monitoring for particulate matter should only be required for fuels that have the potential to exceed the standard (e.g., coal and heavy fuel oils). For the opacity standard, the visual observations specified in *4. Specific Monitoring*

<u>Requirements</u> are enough to demonstrate compliance. For the sulfur dioxide standard, the monitoring of sulfur content in the fuel as required in <u>4. Specific Monitoring Requirements</u> is adequate to demonstrate compliance.

The maintenance of AP-42 equations and results on an hourly basis is unnecessary because the heating capacity of the asphalt heaters are not changing, the heat content of the HSD is constant, and the standards are in pounds of pollutant per million BTU. Therefore, the results of the equations will always be the same and recalculating the results on an hourly basis will not yield any additional data that could be used to demonstrate compliance with the standards.

Response-Where applicable, the requested changes have been made to the permit.

11. Draft Permit Page Number: Page 13 of 25

4. Specific Monitoring Requirements:

The permittee shall monitor and maintain records of the following information:

- a. Hours of operation when the Asphalt Heater(s) burn high sulfur diesel
- b. Maintain a copy of the MSDS for the current HSD being combusted to verify that the sulfur content by weight does not exceed 0.5 percent.
- c. When HDS is being combusted, a daily (calendar day) log shall be maintained noting the following information:
 - 1) Whether any air emissions were visible from the asphalt heater stack; and
 - 2) Whether the visible emissions were normal for the asphalt heater stack.
 - 3) The color of the emissions and whether the emissions were light or gray.
 - 4) The cause of the abnormal visible emissions. Should any abnormal emissions persist for more than a day, the permittee shall notify the Regional Office in Florence, Kentucky.
 - 5) Any corrective action taken.
- c. The number of gallons of HSD combusted in the Asphalt Heater(s)
- d. During any period exceeding 24 consecutive hours that HSD is combusted, the permittee shall make daily observations of the asphalt heater stack for visible emissions.

Explanation: The proposed periodic monitoring requirements are consistent with periodic monitoring requirements found in Title V permits for similar units combusting HSD as a secondary fuel, and are sufficient to demonstrate compliance with all applicable regulations. All record keeping requirements have been moved to <u>5. Specific Record keeping Requirements</u>.

Response-Where applicable, the requested changes have been made to the permit. However, conditions must compy with the respective regulation. Facilities must operate in compliance and not wait 24 hours before recording informations or making corrections.

12. Draft Permit Page Number: Page 13 of 25

5. Specific Record keeping Requirements:

When the secondary fuel, high sulfur diesel, is fired, the permittee shall maintain a daily log indicating the asphalt heater rated capacity (mmBTU/hr), hours of operation, gallons of HSD consumed, percent sulfur content, and visible emissions observations.

When combusting the secondary fuel, high sulfur diesel, the permittee shall maintain a monthly log of the monitoring results specified in 4(a)(b), and (c). The results of the daily opacity monitoring specified in 4(d) shall only be required if visible emissions are observed. In the case where no visible emissions are observed, records are not required to be logged. When visible emissions are observed, the following information shall be logged:

a. Date and time of observation.

- b. The color of the emissions and whether the emissions were light or gray.
- c The cause of the abnormal visible emissions. Should any abnormal emissions persist for more than a day, the permittee shall notify the Regional Office in Florence, Kentucky.
- d Any corrective action taken.

Explanation: The proposed record keeping requirements are consistent with record keeping requirements found in Title V permits for similar units combusting HSD as a secondary fuel, and are sufficient to demonstrate compliance with all applicable regulations. Record keeping should only be required on a monthly basis for the fuel usage and hours of operation. For opacity monitoring, results should only be recorded if visible emissions are observed. Additional records would not help the state determine compliance with the applicable standards.

Response-Where applicable, the requested changes have been made to the permit.

13. Draft Permit Page Number : Page 16 of 25

SECTION B – INSIGNIFICANT ACTIVITIES

The following listed activities have been determined to be insignificant activities for this source pursuant to Regulation 401 KAR 50:035, Section 5(4). While these activities are designated as insignificant the permittee must comply with the applicable regulation and some minimal level of periodic monitoring may be necessary:

Description

Generally Applicable Regulation**

<u>Description</u>	Generally App	plicable Regulation
(T-8) Asphalt Storage Tan	k	N/A
420,000 gallon capacity	$1,589 \text{ m}^3$	
(T-9) Asphalt Storage Tan	k	N/A
420,000 gallon capacity	$1,589 \text{ m}^3$	
(T-24) Asphalt Storage Tan	k .	N/A
1,285,200 gallon capacity 4,862 m ³		
(T-10) Fixed Roof Diesel St	orage Tank	401 KAR 61:050
10,000 gallon capacity	37.8 m^3	(exempt by Section 1(3))
(T-11) Fixed Roof Diesel St	orage Tank	401 KAR 61:050
10,000 gallon capacity	37.8 m^3	(exempt by Section 1(3))
(T-12) Fixed Roof Diesel St	orage Tank	401 KAR 61:050
10,000 gallon capacity	37.8 m^3	(exempt by Section 1(3))
(T-13) Fixed Roof Diesel St	orage Tank	401 KAR 61:050
10,000 gallon capacity	37.8 m^3	(exempt by Section 1(3))
(T-14) Fixed Roof Diesel St		401 KAR 61:050
10,000 gallon capacity	37.8 m^3	(exempt by Section 1(3))
(T-15) Fixed Roof Mineral	Spirits Storage	Tank N/A
21,000 gallon capacity	$79.0 \ m^3$	
(T-24) Asphalt Storage Tan	k	N/A
1,285,200 gallon capacity	$4,862 \text{ m}^3$	
(T-25) Asphalt Storage Tank		N/A
1,285,200 gallon capacity	$4,862 \text{ m}^3$	
Surface Coating of Tanks		

(1,000 gallons per year maximum of coating material)

Explanation: One of the asphalt storage tanks (T-24) is listed twice. One reference should be removed. Mineral Spirits is not a petroleum liquid as defined in 401 KAR 61:050 Section 1(1). Therefore, this tank should not be listed with the gasoline storage tanks and should be moved to insignificant activities section of the permit (**SECTION C - INSIGNIFICANT ACTIVITIES**).

Response-The requested duplicate emissions point was deleted, and the mineral spirits storage tank was moved to the insignificant activity list on the permit.

14. Draft Permit Page Number: Page 20 of 25

10. Bulk Gasoline Terminals

<u>Pursuant to 40 CFR 63, Subpart R, Paragraph 63.420(h)</u>; Each owner or operator of an affected source bulk gasoline terminal or pipeline breakout station is subject to the provisions of 40 CFR 63 Subpart A – General Provisions, as indicated in Table 1.

Explanation: The Greater Cincinnati Terminal is not an "affected source", as defined in 40 CFR 63, Subpart R. Therefore, paragraph 63.420(h) is not applicable.

Response-After review of 40 CFR 63, Subpart R, paragraph 63.420(h), the division determined that the Greater Cincinnati Terminal is not an affected source. Based on information in the permit application, a statement has been made in the permit that this regulation does not currently apply to the terminal.